



# Dwindling or Thriving? Making Sense of the Diversity of Agricultural and Rural Dynamics in Thailand

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## Abstract

A vast amount of research has focused on the dynamics of the Thai agricultural sector and rural areas. The study describes two narratives that have emerged from the existing research. One narrative portrays a thriving innovative agricultural sector, striving to develop systems to promote and guarantee good agricultural practices. The other narrative depicts a dwindling agricultural sector with an ageing farming population or where farmers have diverse non-farming activities and where farming no longer constitutes a major source of income. Most research studies fail to consider the link between the two apparently contradictory narratives. Similarly, recent national development plans in Thailand make reference to both narratives, without establishing a formal link between the two. This study proposes how future research could be oriented to establish a link to further our understanding of the current changes taking place in the agricultural sector and in rural areas in Thailand.

**Keywords:** Dwindling, Thriving, Agricultural Dynamics, Rural Society

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### บทคัดย่อ

การศึกษาในครั้งนี้นำเสนอเรื่องราว 2 เรื่องที่ได้จากการทบทวนงานวิจัยที่ศึกษาเกี่ยวกับพลวัตของสังคมชนบทและภาคการเกษตรของไทย เรื่องแรกแสดงให้เห็นถึงความเฟื่องฟูของภาคการเกษตรที่มีการเปลี่ยนแปลง เช่น พัฒนาระบบเพื่อสนับสนุนและรับรองการปฏิบัติทางการเกษตรที่ดี ส่วนเรื่องที่สองอธิบายถึงความเสื่อมถอยของภาคการเกษตร อาทิเช่น การเกษตรถูกขับเคลื่อนโดยผู้สูงอายุ หรือเกษตรกรที่มีกิจกรรมอื่น ๆ ซึ่งรายได้หลักของเกษตรกรไม่ได้มาจากภาคการเกษตร ซึ่งในงานวิจัยส่วนใหญ่เชื่อมโยงสองเรื่องที่ขัดแย้งกัน เพียงเล็กน้อย สอดคล้องกับแผนพัฒนาเศรษฐกิจและสังคมแห่งชาติฉบับที่ 11 และ 12 ที่กล่าวถึงสองเรื่องดังกล่าวแต่ไม่ได้เชื่อมโยงเข้าด้วยกัน การศึกษาในครั้งนี้ได้นำเสนอแนวทางการวิจัยในอนาคตเพื่อเชื่อมโยงทั้งสองเรื่องนี้ให้ดีขึ้น และเพื่อให้เข้าใจการเปลี่ยนแปลงที่เกิดขึ้นใน ภาคการเกษตรและภาคชนบทของประเทศไทย ได้สมบูรณ์ยิ่งขึ้น

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## Introduction

Thailand has been lauded for its dynamic agricultural sector, which has established the country as one of the world's top exporters for a wide range of products, such as cassava, sugar, fish, shrimp and rice (Cai et al., 2009; FAO, 2016). In particular, cassava, sugarcane and rubber are mainly produced for export (Mangmeechai, 2014). Despite the relative decrease in the economic importance of the agricultural sector in the Thai national economy, many research studies have been conducted in the past 10 years on the sector and, more generally, on Thai rural areas. This research addressed a wide range of issues, such as value chains, organic farming, certification processes and the evolution of rural society.

The following analysis discusses the two main narratives that have emerged from research with regard to the dynamics of Thai agriculture. A narrative can be considered as a set of images, metaphors and theories, which are interconnected and widely shared, to the extent that they have a strong influence on representations (Röling and Maarleveld, 1999). The first narrative focuses on the agricultural sector and describes it as a thriving and dynamic economic sector. This narrative has been well established for several decades. More recently, studies have revealed a different image of Thai rural areas and the agricultural sector. They describe a rural society in transition, where agriculture's economic and social importance is dwindling, the farming population is ageing and **farmers are increasingly developing non-farming activities**.

This study describes both narratives and focuses on the second more recent narrative. The paper then goes on to discuss the connections that research and public policies have established between the two apparently contradictory narratives. Finally, some guidance for future research is proposed to further our understanding of the link between the two narratives and to provide an overview of the current changes taking place in the agricultural sector and in rural areas of Thailand.

## Two Contrasting Narratives

### *A Thriving Agricultural Sector*

Many studies have presented a dynamic and even blossoming Thai agricultural sector. First, in the past decade, there have been numerous initiatives to set up certification

systems for good agricultural practices in terms of environmental impact and food quality. These initiatives have been developed in many agricultural value chains, such as fruit and vegetables (Amekawa, 2013; Pongvinyoo et al., 2015), rice (Pornpratansombat et al., 2011; Srisopaporn et al., 2015) and shrimp (Giap et al., 2009; Vandergeest, 2007). Kersting and Wollni (2012) and Holzapfel and Wollni (2014) highlighted cases where obtaining certification has helped producers connect with both domestic and international markets and increase their income. Second, studies have also reported on how small-scale farms in the North and North East Regions are successfully integrated into domestic and international market channels (Tipraqsa and Schreinemachers, 2009; Ekasingh et al., 2007). Private actors organize contract farming that supports market integration (Shankar et al., 2010). Third, powerful agro-industries, such as the Chaoren Popkhand Group have emerged as players on an international level (Briones and Rakotoarisoa, 2013; Poupon, 2015).

This narrative does not suggest that all the above-mentioned initiatives were successful. For instance, several initiatives to set up good agricultural practices failed to change farming practices (Schreinemachers et al., 2012) or did not improve farmers' incomes (Krause et al., 2016). Moreover, some changes may be considered as negative, such as the increased use of pesticides related to the intensification of farming in upland areas (Riwthong et al., 2015). Instead, the narrative presents the sector's dynamics and its capacity to innovate, cope with changes in consumer demands, compete on international markets and contribute to poverty reduction (Leturque and Wiggins, 2010).

### *A Dwindling Agricultural Sector*

A second set of studies depicts the profound transformations that have taken place in Thai rural areas over the past 25 years. These studies argue that the transformations have led to the demise of the agricultural sector. This narrative has become increasingly common in the research studies published in the past 5 years, although the key elements underpinning the narrative existed 20 years ago (Funahashi, 1996).

The narrative of a dwindling agricultural sector is based on two key arguments. First, in many areas in Thailand, farming has become an activity for old people. Rigg et al. (2012) studied a village in the North East Region. They found that over a period of 25 years, the average age of farmers had increased from 35 to 55 years. In their study, in 2008, 32% of farmers were below 45 and 46% were over 60. Nilsen (2014) and Gödeke

and Waibel (2011) identified a wide gap in the age pyramid of villages in the Northern Province where most people aged between 20 and 40 had moved to cities in order to find a job. Second, for many small-scale farms, farming has become one of many income-generating activities. It no longer constitutes the main economic activity (Rigg et al., 2012). Agricultural activities are part of broader livelihood strategies at family level. Nilsen (2014) revealed that the remittance sent by young people working in cities to sustain their families living in rural areas plays a key role. According to Rigg (2013), the consequence of this situation is that rural households and villages can no longer be considered as isolated in a rural world that is cut off from urban areas.

This evolution can be explained by a key factor: in Thailand most farming activities generate low profits. According to data from the 2003 agricultural census, most farms are small scale, with a national average of 3.2 ha of land (Rigg et al., 2016). In a study of two villages in the North East Region, Formoso (2016) found that the average area of land farmed had actually decreased over the past 30 years. In addition, there has only been a limited increase in the productivity of small-scale farming (Walker, 2012). Bechetti et al. (2011) demonstrated that farmers' participation in fair trade and the shift to organic production practices have increased farm incomes but not labour productivity. Thus, studies promoting the narrative of a dwindling agricultural sector argue that the labour productivity of agricultural activities is lower overall than that of alternative income-generating activities available in rural areas and in cities. This helps explain the migration of rural youth and why the farming population is ageing.

These changes have had several impacts on the agricultural sector. First, mechanization of agricultural operations has become widespread (Formoso, 2016; Soni et al., 2013). Second, landowners increasingly hire labourers, who often come from neighbouring countries (Barney, 2012; Rungmanee, 2015). Third, many elderly farmers are geared towards self-sufficiency, rather than to developing market links. In the North East Region, Rattanasuteerakul and Thapa (2012) found that farmers grew organic vegetables primarily for health reasons and not for the market (due to the lack of premium prices compared to non-organic vegetables). Hirokawa (2014) argued that integrated farming (i.e. mixed farming with diverse crops and livestock) could contribute to food autonomy for ageing farmers in the North East Region. Fourth, limited benefits from agriculture create a "vicious circle" of low profitability: farmers with low profits are

reluctant to reduce their off-farm activities and spend more time on their farms to try more profitable crops (Kasem and Thapa, 2011). Thus, agricultural innovations are bound to be limited.

Studies that present this narrative describe a relationship between urban and rural areas, which differs from the situation in Europe in the XX<sup>th</sup> century. In France, from the 1950s onwards, many rural inhabitants sold their land and moved to urban areas on a permanent basis. The remaining farms increased in size (Vianey, 2015). In Thailand, most rural families keep their land and many continue cultivating, albeit extensively or using exclusively paid labour. The reasons that have been put forward to explain why rural families refuse to sell land include: the emotional link that families of rural origin have with land and the fact that land represents a secure asset in a context where many jobs in cities are informal and unstable. For example, thousands of workers in urban areas were laid off during the 1997-1998 economic crisis and more recently during the 2011 floods in Bangkok. Many workers temporarily went back to rural areas to make a living (Rigg and Salamanca, 2015).

### *Limited Dialogue*

At first glance, these two narratives appear contradictory. Do they refer to the same farms, the same value chains and the same rural areas? Answering the question is not easy given the limited dialogue between the two lines of research. On the one hand, studies that adopt the narrative of a dynamic agricultural sector rarely take account of the fact that farmers are involved in multiple activities at household level. On the other hand, studies suggesting that agriculture is dwindling pay little attention to agricultural initiatives/innovation at village level.

It is probable that studies, which portray a dwindling agricultural sector, focus on areas where the sector is struggling to provide a satisfactory income to farmers (e.g. small-scale rain-fed rice production in the North East Region) or where industrial development has largely undermined the agricultural sector (e.g. Ayutthaya Province in the Central Region). Many of these studies have demonstrated that the profitability of rice farming on smallholdings is limited compared to possible alternative income-generating activities in rural and urban areas. However, some farmers are involved in more profitable agricultural activities (fruit, shrimp, dairy, etc.) and earn a satisfactory

income compared to non-agricultural activities. Young people are also interested in developing these agricultural activities. For instance, Piotrowski et al. (2013) found that in a village in Buriram Province, growing cash crops (instead of rice) reduced the willingness to migrate. Farm size may also play a role in the relative importance of both narratives. VanWey (2005) showed that in the Buriram Province, more land was correlated to a lower probability of migration in the case of farms of less than 10 ha.

These two narratives are also reflected in the orientation of farmers' organizations. Faysse and Onsamrarn (unpublished) conducted an assessment of agricultural cooperatives in Thailand and revealed that some cooperatives are geared to improving their members' farm incomes, while others strive to improve farmers' self-sufficiency.

### *Public Policies: Entwined Narratives*

The Thai government set up the 11<sup>th</sup> National Economic and Social Development Plan as a key policy document for the 2012-2016 period. In 2016, the 12<sup>th</sup> Plan was adopted for the 2017-2021 period (National Economic and Social Development Board - NESDB, 2012 and 2016). The 11<sup>th</sup> Plan mentioned the issue of the ageing rural population and the fact that farming was less attractive than other sectors, especially for young people (e.g. NESDB, 2012, p. 59). The plan defined objectives for the agricultural sector: to increase the share of agricultural commodities **among the domestic products** and increase the number of self-reliant farms with a target of 50% by 2016 (NESDB, 2012, p. 62 and p. 82). Similarly, the 12<sup>th</sup> Plan includes a section dedicated to the Northern Region to promote greater added value from agriculture and greater self-reliance (NESDB, 2016, p. 174 and 175).

However, neither plan proposes a typology of the different situations facing Thai farms in their initial assessment and recommendations. They do not clarify how to prioritize goals or whether they should be realized jointly, depending on the type of farm, the value chain or the geographical location.

In 2016, the Ministry of Agriculture and Cooperatives launched the Agri-map project to zone agricultural land. The project focuses on the suitability of land for specific crops and sets out to improve the coordination between actors to ensure that agricultural supply meets demand. However, the project does not assess which zones

would be suitable for promoting market links and increased added value and which would be more appropriate for developing food self-sufficiency for small farmers.

### Providing a Framework to Link the Narratives

The two narratives provide a relevant view of the dynamics of the Thai agricultural sector. However, neither view is complete if it is considered in isolation. For a more complete overview, research could use the same analytical grids to identify areas where agriculture is dynamic and where it has become largely “dormant”. More generally, studies could assess the relative importance of each narrative and the connections between the two as a function of the characteristics of farms and households, value chains and geographical location. A detailed assessment could be conducted to determine the impact of these factors on: i) the capacity of farmers to generate a satisfactory income from farming compared to alternative income-generating activities, which are available in rural and urban areas; and ii) the age distribution of farmers and the presence of young farmers.

Past research has helped delineate a preliminary typology of Thai rural areas. The first type includes zones close to urban areas where farming is no longer of any importance to villagers, for instance in the Ayutthaya Province (Rigg et al., 2008). In these areas, factories provide employment for local inhabitants, as well as migrants. According to Rigg et al. (2008), some villages in rural areas in this province have become “dormitories”. The second type includes zones where there is little opportunity for profitable farming activities, given the current characteristics of farms and the crops and breeding activities available to farmers. Rigg and Salamanca (2015) identified villages in the North East Region where agriculture has become dormant. This does not preclude possible changes in the future. Indeed, more economically sustainable farming is possible if farm characteristics change (e.g. increase in farm size) or if new agricultural activities were developed. Finally, the third group is made up of zones in the Central and South Regions where farms have identified opportunities for profitable economic activities (Cheyroux, 2003; Pongvinyoo et al., 2013; Vandergeest, 2007). More detailed research could confirm or refute this typology.



Which key criteria differentiate the three zones? The factors that determine the potential for profitable agricultural activities may vary from one area to another. In the delta plain around Bangkok, frequent floods limit the possibilities of farm intensification, especially the development of arboriculture. Kasem and Thapa (2011) showed that lack of affordable labour is a constraint for intensification (when shifting from rice to vegetable production, for instance). By contrast, in zones close to the Laos border, intensive vegetable farming is possible because of the presence of Laotian workers (Rungmanee, 2014).

A more detailed assessment of the connections between both narratives would be helpful, for instance an examination of the impact of ageing farmers on key agricultural value chains (especially export-oriented), now and in future.

More complete analyses should avoid the over-simplification of agricultural and rural dynamics, which both narratives tend to convey. First, many farms are actually concerned by both narratives, inasmuch as farmers strive to earn a living from farming but are also getting older. Second, these studies should avoid simplifying the diversity of existing situations. For example, contrary to Rattanasuteerakul and Thapa's study (2012), some studies have shown that price premium is an important factor that influences small-scale farmers' decision to adopt organic practices in the North East and North Regions for rice (Pornpratansombat et al., 2011; Setboonsarng, and Acharya, 2015) and vegetable production (Thapa and Rattanasuteerakul, 2011).

This research could also help "unravel" the two narratives with regard to public policies, by revealing the diversity of current agricultural and rural dynamics in Thailand and providing specific goals adapted to different types of farms, agricultural value chains or geographical locations.

## Conclusion

The study revealed the existence of two main narratives regarding the dynamics of the Thai agricultural sector and **the importance of making a link between the two**. The narrative of a dwindling agricultural sector is not specific to Thailand. According to Rigg et al. (2016), the transformations underpinning this narrative can be found throughout East and South East Asia.

In order to make sense of both narratives, new farm typologies are required. In many countries around the world, researchers have proposed farm typologies that have subsequently been applied to the design of public policies. This is the case in Brazil (Sabourin, 2015) and Morocco (Faysse, 2015). In both cases, the typologies broadly established a distinction between small- and large-scale farming. In Thailand, the emerging typology is different: there are farms where farmers generate their main income from farming and there are farms where agriculture has become a marginal activity or one for retired people. This emerging typology calls for a new analytical approach, which would further our understanding of the dynamics at farm level, along the agricultural value chains and on a geographical level.

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